

allocated to the TIC in 1994. This figure is based on cost per unit multiplied by the estimated units in place for the year 1992, the revenue requirement underlying the January 1994 Transport Restructuring Tariff Filing. The cost per unit was calculated using the same method as in the Access Reform Tariff Filing, including the same loading and separations factors. U S WEST has added \$1,301,868 in SS7-STP costs since 1994. Workpaper D details these calculations.

Finally, U S WEST did not make any true-ups to SS7 costs due to exogenous cost adjustments in the trunking basket.

VI. U S WEST IS CORRECTING ITS CALCULATIONS OF THE AMOUNT OF CENTRAL OFFICE EQUIPMENT ("COE") MAINTENANCE EXPENSES REMOVED FROM THE TIC; U S WEST'S MARKETING EXPENSES WERE PROPERLY ALLOCATED

The Commission has directed price cap LECs to provide detailed information substantiating the amount of COE maintenance and marketing costs that were removed from the trunking basket, and the portion of that amount that was removed from the TIC.<sup>37</sup> In addition, the Commission tentatively concluded that the price cap LECs must allocate these exogenous cost changes to the TIC as it existed on June 30, 1997.<sup>38</sup>

A. COE Maintenance Expenses

In the Access Reform Tariff Filing, U S WEST directly assigned the trunking component of the COE Maintenance Expense to the TIC. U S WEST subsequently determined that, rather than directly assigning this expense to the TIC, it should

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<sup>37</sup> Designation Order ¶ 67.

<sup>38</sup> Id. ¶ 68.

have been spread to the components within the trunking basket. The effect of this reassignment is shown in Workpaper E. Instead of removing \$11.7 million from the TIC, the revised TIC amount is \$6.1 million, with the remainder spread to the other trunking elements. This reallocation was based on the spread of June 30, 1997 revenues across all products in the trunking basket, including special access. U S WEST is working with the Commission's staff to file a tariff correction which reflects the proper allocation of this expense across all trunking basket categories, including the TIC.<sup>39</sup>

U S WEST quantified the maintenance expense using its Part 69 model, modified for the Commission's maintenance rule change. The months of July and August 1996 were revised for the rule change and compared to the actual results for these months. U S WEST annualized the difference in the maintenance expense and used this amount as the maintenance adjustments to the TIC in its Access Reform Tariff Filing. Rather than resubmitting the voluminous workpapers prepared for that filing,<sup>40</sup> U S WEST's Workpaper E details a simpler methodology used to determine the maintenance expense reallocation based on the 1996 ARMIS reports. That is the same methodology used by U S WEST to model the months of July and August 1996, the basis for its original reallocation.

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<sup>39</sup> The Commission also tentatively concluded that the AT&T workpaper format for the TIC recalculation effectively illustrates the transport costs that are to be removed from the TIC and the facilities-based portion of the TIC. Designation Order ¶ 90. U S WEST agrees. Thus, its tariff correction will be consistent with the AT&T workpaper format.

<sup>40</sup> See Workpaper 8 entitled "COE Maintenance" of the Access Reform Tariff Filing.

U S WEST allocated Account 6210 Central Office Maintenance Expense to model the Part 69 cost element change based on the distribution of Part 69 Investment in Account 2210, Central Office Switching, in each cost element. Likewise, Account 6220 Operator Services Maintenance Expense was allocated across Part 69 cost elements based on the distribution of Account 2220 Operator Investment in each element. Account 6230 Central Office Circuit Expense was allocated across Part 69 cost elements based on the distribution of 2230 Circuit Equipment Investment in each element. The result using annual ARMIS data is similar to amounts determined using U S WEST's Part 69 model based on annualized data from July and August 1996. Line port maintenance expense was removed from the switching element after the above reassignments were completed and added to the common line element for the new line port category. Minor deviations from the original filing are attributed to the method used, that is two months multiplied by six versus the actual expenses from ARMIS.

B. Marketing Expenses

U S WEST used its actual Interstate Marketing Expense, as reported in ARMIS 43-04, to determine the amount of expenses moved to the new Marketing Basket. The total amount of interstate marketing expenses for 1996 was \$112.4 million, less \$440,000 associated with pay-telephone set deregulation.<sup>41</sup>

The Commission's rules specify that LECs must recover marketing expenses allocated to the common line and traffic sensitive baskets, and switched access

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<sup>41</sup> See ARMIS 43-01, row 1140, column h.

services within the Trunking Basket, in the new Marketing Basket.<sup>42</sup> U S WEST determined that \$23.9 million of the interstate marketing expense was associated with special access.<sup>43</sup> Therefore, the total exogenous adjustment was \$88.1 million (i.e., \$112.4 million minus \$400,000 associated with payphones minus \$6,000 associated with interexchange retail customers minus \$23.9 million associated with special access services). Workpaper 3 of the Access Reform Tariff Filing details these calculations. As shown on page 4 of Workpaper 3, the Trunking Basket adjustments were allocated based on switched access revenues in each category (including the Interconnection Category) as of June 30, 1997. U S WEST's allocation of marketing expenses complies with the requirements of Section 69.156(a) of the Commission's rules, as well as the Commission's holding in the Access Reform Order.<sup>44</sup>

C. Allocation Of Cost Changes To The June 30, 1997 TIC

U S WEST agrees with the Commission's tentative conclusion that trunking cost changes should be reallocated based on the trunking revenues in baskets as they existed prior to July 1, 1997 (i.e., 1996 demand multiplied by the current rate). In fact U S WEST followed that methodology.

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<sup>42</sup> 47 C.F.R. §§ 69.156(a) and 61.42(d)(6).

<sup>43</sup> See ARMIS 43-01, row 1140, column s.

<sup>44</sup> 47 C.F.R. §§ 69.156, 61.42(d)(6); see also First Report and Order at ¶ 323 ("With respect to the trunking basket; the exogenous adjustment shall not reflect the amount of any Account 6610 marketing expenses allocated to special access services.").

## VII. TANDEM SWITCHED TRANSPORT: ACTUAL MINUTES OF USE ("MOU")

In the Access Reform Order, the Commission directed price cap LECs to begin calculating their Tandem Switched Transport ("TST") rates using the actual average MOU per trunk for that service.<sup>45</sup> Prior to the Access Reform Order, the Commission's rules required the LECs to assume 9,000 MOU per trunk. The Commission expected actual usage to run less than 9,000 MOU per trunk, so that the change would increase TST rates and reduce the TIC. In fact, many LECs (including U S WEST) found that their TST usage exceeds 9,000 MOU (U S WEST's usage averages 11,353 MOU), which reduced TST rates and, based on the workings of the Commission's rules, increased the TIC. In the face of complaints from AT&T and MCI, the Designation Order seeks comment on whether the Commission should allow the LECs who find themselves in this situation to increase their TIC.

In addition, the Designation Order tentatively concludes that the LECs are to recalculate their rates as of 1993 (when the Commission restructured local transport to create the TST and the TIC) using actual MOU and then determine what proportion of the original TIC was attributable to the assumed 9,000 MOU; they must then reassign that portion of the TIC to TST.<sup>46</sup> The Designation Order seeks comment on that approach.

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<sup>45</sup> Access Reform Order, 7 Comm. Reg. (P&F) at 1265 ¶ 206.

<sup>46</sup> Designation Order ¶ 79.

A. The Commission Must Allow The LECs To Increase Their TIC,  
If The Use Of Actual MOU Produces That Result

When the Commission ordered the LECs to use actual MOU to calculate their TST rates, it assumed this step would increase the TST rates and reduce the TIC. It did not, however, translate that assumption into a rule or any other directive dictating that the TIC must decrease in all circumstances. The Commission's rules prescribe how the LECs are to calculate the TIC, and those rules tie the level of the TIC to the level of the TST rates. Unless it changes its rules, the Commission cannot prohibit the LECs from increasing their TIC, if the existing rules (which require use of the LECs' actual MOU) produce that result.

Moreover, if the Commission were to prohibit the LECs from increasing their TICs, it must find some other means for the LECs to recover the amounts they have thereby lost. Absent that, the Commission would effectively disallow a portion of the LECs' revenue requirement with no findings (and no evidence) of unreasonableness.

B. The Methodology Proposed In The Designation Order To Recalculate  
TST And TIC Rates Is Consistent With The Access Reform Order

As noted, the Designation Order seeks comment on a methodology to recalculate TST rates using actual MOU. So long as the Commission applies that methodology equally to LECs whose actual usage exceeds 9,000 MOU, as well as to

those whose usage is below that figure, U S WEST believes the methodology adequately performs the necessary adjustment.<sup>47</sup>

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The Designation Order instructs the LECs to recalculate their TST and TIC rates as described in paragraph 79 of the Designation Order. Workpaper G provides that recalculation

C. TST Rates Include The Cost Of Multiplexers

The Designation Order rejects a contention by BellSouth that the re-initialization of TST rates included the cost of providing multiplexers, though it seeks comment on that issue.<sup>48</sup>

As a matter of history, the Designation Order is mistaken. The provision of TST service requires the use of two multiplexers on the end-office side of the tandem switch, one at the tandem and one at the end office. Since 1993, when the Commission created the TST rate structure, price cap LECs have included the cost of one DS3-DS1 multiplexer in developing TST rates. Indeed, the Commission's Local Transport Restructure Order required the LECs to "include the multiplexing equipment needed to interconnect DS3 transmission facilities with the end office switch."<sup>49</sup> The LECs have recovered the cost of the second multiplexer in the TIC.

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<sup>47</sup> U S WEST also agrees with the tentative conclusion in the Designation Order (§ 78) that price cap LECs should not recalculate their TST rates pursuant to Section 69.111(c) of the Commission's rules.

<sup>48</sup> Designation Order § 80.

<sup>49</sup> In the Matter of Transport Rate Structure and Pricing, Petition for Waiver of the Transport Rules filed by GTE Service Corporation, Report and Order and Further Notice of Proposed Rulemaking, 7 FCC Rcd. 7006, 7037 n.113 (1992).

The Access Reform Order required the LECs to establish a new rate element (Common Transport Multiplexing) to recover the cost of one DS3-DS1 multiplexer on the end-office side of the tandem switch.<sup>50</sup> Because the provision of TST requires another such multiplexer at the end office itself, the LECs reasonably assumed they were to continue to recover the cost of that second multiplexer in TST rates, as they always have. Thus, when it created the CT Multiplexer rate element, U S WEST removed the cost of a multiplexer from the TIC; the cost of the original multiplexer remains in its TST rates.

The summary rejection of this position in the Designation Order is thus puzzling, in that it ignores the prior treatment of multiplexers and gives no consideration to how the LECs should recover these costs. Nor can there be any substantial question that this second multiplexer is essential to the provision of TST service.

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The Designation Order asks the LECs to demonstrate that the weighted average of DS1 and DS3 rates is affected by the multiplexers at the tandem switch.<sup>51</sup> Workpaper H provides that information.

VIII. U S WEST'S ALLOCATION OF UNIVERSAL SERVICE FUND  
CONTRIBUTIONS ACCURATELY REFLECTS INTERSTATE  
END-USER REVENUES

In the Designation Order, the Commission requires each LEC to explain why its methodology for allocating universal service fund ("USF") contributions

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<sup>50</sup> Access Reform Order, 7 Comm. Reg. (P&F) at 1257 ¶ 172.



accurately reflects the distribution of interstate end-user revenues across baskets.<sup>52</sup>

U S WEST calculated factors to allocate the USF contributions to the appropriate baskets on the basis of relative size of end-user revenues in each basket. U S WEST allocated USF contributions in the trunking basket and calculated the increase in the Service Band Index (“SBI”) for the affected categories in the trunking basket based on the relative end-user interstate revenues in each service category.

U S WEST did not rely on the end-user revenues reported in its Form 457 to determine price cap basket allocation factors. U S WEST’s initial Form 457, used by the Commission in its calculation of USF factors, was a preliminary view that will be trued-up and revised in the upcoming March 31, 1998 submission of annual data. In addition, on a going-forward basis, the Form 457 does not have the level of detail necessary to appropriately allocate USF within the trunking basket. Thus, U S WEST believed it was more appropriate to develop an alternative methodology.

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<sup>51</sup> Designation Order ¶ 80.

<sup>52</sup> Id. ¶ 95.

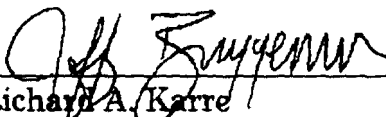
IX. CONCLUSION

For these reasons, the Commission should allow U S WEST's Access Reform  
Tariff Filing to take effect.

Respectfully submitted,

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### BASELINE - 1996 ACCESS LINES

[illegible]

**TEST LINES - 1997-1998 ACCESS LINES**

	PRIMARY RESIDENCE	NON PRIMARY RESIDENCE	TOTAL RESIDENCE	SLB	MLB	BRI-ISDN	PRI-ISDN	CENTREX	TOTAL MLB	LIFELINE	SURCHG
ARIZONA	1,607,457	245,934	<b>1,853,391</b>	51,851	410,673	3,535	1,340	186,446	<b>601,994</b>	10,867	799
COLORADO	1,425,587	266,926	<b>1,692,513</b>	57,712	542,997	8,659	1,330	116,948	<b>669,934</b>	18,067	741
IDAHO	297,163	41,482	<b>338,645</b>	10,227	100,647	1,601	110	16,285	<b>118,643</b>	4,625	120
MONTANA	234,385	21,357	<b>255,742</b>	7,629	82,169	125	20	6,147	<b>88,461</b>	5,958	30
NEW MEXICO	513,710	56,284	<b>569,994</b>	16,087	160,478	3,150	190	22,817	<b>186,635</b>	27,825	128
UTAH	627,901	113,951	<b>741,852</b>	26,422	243,235	2,690	695	60,142	<b>306,762</b>	23,808	245
WYOMING	142,528	14,349	<b>156,877</b>	6,022	60,666	100	35	9,046	<b>69,847</b>	825	69
IOWA	701,100	62,112	<b>763,212</b>	22,514	88,729	493	355	171,670	<b>261,247</b>	0	176
MINNESOTA	1,264,516	169,905	<b>1,434,421</b>	53,755	385,367	26,514	1,110	210,929	<b>623,920</b>	34,458	354
NEBRASKA	328,925	40,319	<b>369,244</b>	12,102	103,340	7,700	225	29,188	<b>140,453</b>	0	52
NORTH DAKOTA	166,877	12,164	<b>179,041</b>	5,230	44,992	210	185	15,361	<b>60,748</b>	7,275	64
SOUTH DAKOTA	175,380	11,608	<b>186,988</b>	6,644	56,858	270	15	19,902	<b>77,045</b>	2,717	15
IDAHO PNB	24,208	1,282	<b>25,490</b>	770	8,785	121	0	19	<b>8,925</b>	511	1
OREGON	801,670	112,532	<b>914,202</b>	31,087	242,817	691	930	116,550	<b>360,988</b>	26,525	950
WASHINGTON	1,436,785	247,377	<b>1,684,162</b>	49,356	410,018	7,007	1,025	154,815	<b>572,865</b>	69,442	1,093
	<b>9,748,192</b>	<b>1,417,582</b>	<b>11,165,774</b>	<b>357,408</b>	<b>2,941,771</b>	<b>62,866</b>	<b>7,565</b>	<b>1,136,265</b>	<b>4,148,467</b>	<b>232,903</b>	<b>4,837</b>

TOTAL LINES W/O SURCH 15,904,552

## Appendix B

I. Line Count Data Formation					II. Line Count Data Identification			
	Sources	Search	<u>Data</u>		First	Second	<u>Criteria</u>	
			Collection	Time Period			Third	Fourth
Primary Residential Lines	D3	S1	C2	T2 1/96-12/96	L2	R4		
Single Line Business	D3	S1	C2	T2 1/96-12/96	N5	L2	B1	
Non-Primary Residential Lin	D3	S1	C2	T1 12/31/96	L2	A0		
BRI-ISDN Lines	D3	S1	C2	T1 12/31/96	N5			

Single Line Business lines are identified by a unique USOC per a location and then by customer name to exclude multi-location customers that are classified as multi-line business.  
Non-Primary Residential Lines are identified per residence location with a field indicator that identifies line type.

# EXOGENOUS ADJUSTMENTS SINCE BEGINNING OF PRICE CAPS

Workpaper B  
Page 1 of 4

Exogenous Adjustment	Date Transmittal No.	Purpose	Method of Calculation
OB&C	1-1-98 TN #884, 885, 886, 887, 890	Redo reallocation of OB&C expenses between price cap rate elements and nonregulated billing and collection rates	Revenue Requirement
Marketing Expense	1-1-98 TN #884, 885, 886, 887, 890	Reallocates marketing expenses to baskets and categories with rate elements purchased by and marketed to end users.	Revenue Requirement
Line Ports	1-1-98 TN #884, 885, 886, 887, 890	Move line port costs from local switching to common line rate elements.	Revenue Requirement
End Office Trunk Ports and Multiplexers	1-1-98 TN #884, 885, 886, 887, 890	Move recovery of the costs of end office trunk ports and multiplexers from local switching to a new Local Switching Trunk Ports Category in Traffic Sensitive basket	Revenue Requirement
STP Port Terminations	1-1-98 TN #884, 885, 886, 887, 890	Moved to new STP Port Termination category in Traffic Sensitive basket from High Cap & DDS category of Trunking basket.	Revenues because it is an existing rate element with specific revenues associated.

# EXOGENOUS ADJUSTMENTS SINCE BEGINNING OF PRICE CAPS

Workpaper B  
Page 2 of 4

Exogenous Adjustment	Date Transmittal No.	Purpose	Method of Calculation
SS7 costs recovered in the TIC	1-1-98 TN #884, 885, 886, 887, 890	Move to Local Switching category of the Traffic Sensitive basket.	Revenue Requirement
COE Maintenance Expense	1-1-98 TN #884, 885, 886, 887, 890	Reallocates recovery of costs based on specific type of COE investment being maintained; from Common Line & Trunking baskets to Traffic Sensitive basket.	Revenue Requirement
DEM Weighting	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from Traffic Sensitive and Common Line baskets to non price cap high cost support mechanisms (USF).	Revenue Requirement
General Support Facilities	1-1-98 TN #884, 885, 886, 887, 890	Moves GSF costs related to nonregulated billing and collection services out of regulated access rates.	Revenue Requirements
Tandem Shared Multiplexers	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from TIC to new rate elements in the Tandem Switched Transport category.	Used existing rate elements, calculated surrogate Revenue Requirement.
Dedicated Tandem Trunk Ports	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from TIC and Tandem Switching to new rate elements in the Tandem Switched Transport category.	Revenue Requirement

# EXOGENOUS ADJUSTMENTS SINCE BEGINNING OF PRICE CAPS

Workpaper B  
Page 3 of 4

Exogenous Adjustment	Date Transmittal No.	Purpose	Method of Calculation
Tandem Switching Revenues in TIC	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from TIC to Tandem Switching.	Revenue Requirement
Effect of Actual MOU/Trunk on Tandem Transmission Revenue	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from Tandem Switched Transport to TIC.	Revenues
Host/Remote Links	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from TIC to Tandem Switched Transport.	Revenue Requirement
Effect of Deaveraged Transport Rates	1-1-98 TN #884, 885, 886, 887, 890	Moves recovery from TIC to appropriate Trunking basket subcategory zones.	Revenues
Universal Service Fund	1-1-98 TN #884, 885, 886, 887, 890	Moved from LTS recovery in Common Line Basket to USF recovery in Common Line, Trunking & Interexchange Baskets	Revenues
LIDB	7-1-97 TN #847	Moved LIDB query revenues from High Cap/DDS category of Trunking basket to Database category of Traffic Sensitive Basket	Revenues
OB&C	7-1-97 TN #847	Reallocate OB&C expenses between price cap rate elements and nonregulated billing and collection rates	Revenue Requirement



# EXOGENOUS ADJUSTMENTS SINCE BEGINNING OF PRICE CAPS

Workpaper B  
Page 4 of 4

Exogenous Adjustment	Date Transmittal No.	Purpose	Method of Calculation
Regulated to Non-Regulated	In Annual Filing since 1996	Reallocation of investment from regulated to non-regulated use based on forecasted regulated and non-regulated usage	Revenue Requirement
Pay Telephone Set Deregulation	4-15-97 TN #823	Moved recovery of pay telephone sets from regulated to non-regulated recovery	Revenues
800 Database	11-26-96 Letter 5-1-93 TN #335	Addition of Costs to Price Cap Recovery; moved recovery from Local Switching category to new Database category	Revenue Requirement
Inmate Pay Telephone	10-16-96 TN #775	Moved recovery of inmate pay telephone CPE from regulated to non-regulated recovery	Revenue Requirement reduced for the reduction in PCI since Price Cap inception
General Support Facilities Reallocation	7-2-93 TN #369	Reallocated GSF costs from Traffic Sensitive, Special Access & Interexchange Baskets to Common Line Basket	Revenue Requirement

## Cost Reallocations Based on Revenues

	Line Port Actual	Revenue	Trunk Port Actual	Revenue	Analog MUX Actual	Revenue	Tandem Trunk Port	Revenue	COE Maint.	Revenue
Common Line	111,443,000	145,001,003							(3,646,000)	(2,886,988)
Traffic Sensitive	(111,443,000)	(145,001,003)	29,117,000	37,884,786	14,468,000	13,325,545			15,158,000	20,099,201
Trunking					(14,468,000)	(13,325,545)	13,078,400	12,045,674	(11,514,000)	(10,604,805)
Interexchange									1	1
	SS7 Actual	Revenue	Host Remote Actual	Revenue	Marketing Actual	Revenue			Other GSF Actual	Revenue
Common Line					(58,361,226)	(46,211,784)			(12,656,688)	(10,021,862)
Traffic Sensitive	5,553,656	5,115,116			(15,009,111)	(19,901,777)			(3,110,052)	(4,123,866)
Trunking	(5,553,656)	(5,115,116)	(14,721,000)	(13,558,567)	(14,728,029)	(13,565,041)			(8,586,360)	(7,908,344)
Interexchange	-	-			0	-			(1,080)	(1,425)

## Revenue versus Revenue Requirement

	Revenue (1)	Revenue Requirement	
Common Line	991,058,512	1,251,615,596	0.791823
Traffic Sensitive	459,473,114	346,515,942	1.325980
Trunking	771,875,701	838,051,846	0.921036
Interexchange	44,019,602	33,356,923	1.319654
Total	2,266,426,929	2,469,540,308	0.917753
Memo Switching	416,730,220	320,285,135	1.301123

## Total Excluding Intrabasket Changes, Marketing and Maintenance Expense

	Actual	Revenue	Net
Common Line	98,786,312	134,979,142	36,192,830
Traffic Sensitive	(94,531,396)	(130,684,209)	(36,152,813)
Trunking	(28,608,016)	(26,349,005)	2,259,011
Interexchange	(1,080)	(1,425)	(345)

Note 1: Revenue based on SUM-1, Erratum to 1997 Annual Access Compliance Filing, Base Period Demand x Proposed Rates

Note 2: Revenue Requirement based on 1996 ARMIS 43-01

**Calculation of SS7-STP Costs Added to TIC (Para. 61)**

1 1996 STP Investment Includes Contracts and CCSAC	Access Reform WP 12, pg. 17	52,395,594
2 Interstate Revenue Requirement	Access Reform WP 12, pg. 16	6,741,746
3 % Interstate Revenue Requirement of Total	L 2 / L 1	0.12867009
4 STP Investment Prior to January 1994 at Initialization of TIC	1992 Estimated Investment	39,748,251
5 % Interstate Revenue Requirement	L 3 x L 4	5,114,411
6 Portion of Revenue Requirement in Original TIC	L 5 x 80%	4,091,529
7 Additions to TIC since inception--January 94 to Present**	L 2 x 80% less L 6	1,301,868

1997 Additions are less than \$2,000

**1992 Estimated  
SS7 - STP Investment**

## Signal Transfer Point

				Col. A	Col. B STP Investment	Col. C Indirect Loading Workpaper 11, Page 18 & 19, Line 27 Dec. '97 Filing	Col. D = Col. B x Col C
State	STP Tandem Location	Calculation	Ports				
Line 1	<u>AZ</u>	TCSNAZMA00W	28		693,010	1.106892	767,087
Line 2	<u>CO</u>	DNVRCOMA19W	Line 2 Col. B x Line 43 Col. C	99	2,450,285		
Line 3		CLSPCOMA00W	Line 3 Col. B x Line 43 Col. C	32	792,011		
Line 4		Total			3,242,296	1.277807	4,143,029
Line 5	<u>ID S</u>	BOISIDMA00W	Line 5 Col. B x Line 43 Col. C	26	643,509	1.085011	698,215
Line 6	<u>MT</u>	HLNAMTMA00W	Line 6 Col. B x Line 42 Col. C	27	691,556		
Line 7		MSSLMTMA00W	Line 7 Col. B x Line 42 Col. C	27	691,556		
Line 8		Total			1,383,113	1.084910	1,500,553
Line 9	<u>NM</u>	ALBQNMA00W	Line 9 Col. B x Line 43 Col. C	37	915,763	1.182450	1,082,844
Line 10	<u>UT</u>	PROVUTMA00W	Line 10 Col. B x Line 43 Col. C	46	1,138,516	1.240043	1,411,809
Line 11	<u>WY</u>	CHYNWYMA00W	Line 11 Col. B x Line 42 Col. C	24	614,717		
Line 12		CSPRWYMA00W	Line 12 Col. B x Line 42 Col. C	24	614,717		
Line 13		Total			1,229,433	1.122331	1,379,831
Line 14	<u>IA</u>	DESMIADT00W	Line 14 Col. B x Line 43 Col. C	39	965,264		
Line 15		MSCYIATC00W	Line 15 Col. B x Line 43 Col. C	39	965,264		
Line 16		CDRRIADT00W	Line 16 Col. B x Line 42 Col. C	25	640,330		
Line 17		DVNPIADT00W	Line 17 Col. B x Line 42 Col. C	24	614,717		
Line 18		DVNPIAEA00W	Line 18 Col. B x Line 42 Col. C	24	614,717		
Line 19		SPNCIADT00W	Line 19 Col. B x Line 42 Col. C	29	742,783		
Line 20		SXCYIADT00W	Line 20 Col. B x Line 42 Col. C	29	742,783		
Line 21		Total			5,285,856	1.143737	6,045,628
Line 22	<u>MN</u>	DLTHMNME00W	Line 22 Col. B x Line 41 Col. C	24	834,624		
Line 23		OWTNMNOW00W	Line 23 Col. B x Line 42 Col. C	25	640,330		
Line 24		WNDMMNW100W	Line 24 Col. B x Line 42 Col. C	25	640,330		
Line 25		Total			2,115,284	1.155213	2,443,604
Line 26	<u>NE</u>	OMAHNENW20W	Line 26 Col. B x Line 43 Col. C	108	2,673,038	1.393276	3,724,280
Line 27	<u>ND</u>	FARGNDBC00W	Line 27 Col. B x Line 43 Col. C	35	866,262		
Line 28		GDFRNDBC00W	Line 28 Col. B x Line 43 Col. C	35	866,262		
Line 29		Total			1,732,525	1.112137	1,926,805
Line 30	<u>SD</u>	RPCYSDCO00W	Line 30 Col. B x Line 42 Col. C	22	563,490		
Line 31		SXFLSDCO00W	Line 31 Col. B x Line 42 Col. C	22	563,490		
Line 32		Total			1,126,981	1.141534	1,286,487
Line 33	<u>OR</u>	PTLDOR1303W	Line 33 Col. B x Line 43 Col. C	70	1,732,525		
Line 34		EUGNOR5300W	Line 34 Col. B x Line 43 Col. C	42	1,039,515		
Line 35		Total			2,772,040	1.131502	3,136,569
Line 36	<u>WA</u>	SPKNWA0100W	Line 36 Col. B x Line 43 Col. C	45	1,113,766		
Line 37		STTLWA0301W	Line 37 Col. B x Line 43 Col. C	156	3,861,055		
Line 38		STTLWA0608W	Line 38 Col. B x Line 43 Col. C	157	3,885,806		
Line 39		Total			8,860,627	1.151331	10,201,511
Line 40		Total		1345	33,811,991		39,748,251
1997 Additions				2	0.001486989		

## Installed Investment

		Col. A	Col. B	Col. C=Col. B/Col. A
		Ports	Cost	Investment Per Unit
Line 41	24 Port Unit	24	834,624	34,776
Line 42	36 Port Unit	36	922,075	25,613
Line 43	48 Port Unit	48	1,188,017	24,750

## Justification and Calculation of COE Maintenance Expense Adjustment

Source/Calculation					Interstate	Common Line	Switching	Transport	Information	Special	IX
					a	b	c	d	e	f	g
1 Category 1	Account 2220 Operator	ARMIS 43-04, Row 1170			7,065	-	355	27	6,365		318
2 Orig. Dist.	b=Line 1b/1a, c=1c/1a, etc.					0	0.050248	0.003822	0.90092	0	0.045011
3 Category 2	Account 2210 Tandem	ARMIS 43-04, Row 1204			221,475	-	-	221,475	-		-
4 Category 3	Account 2210 Switching	ARMIS 43-04, Row 1219			913,655	-	913,655	-	-		-
5 Orig. Dist.	Total Line 3 + Line 4				1,135,130	-	913,655	221,475	-		-
6 Total	Line b=5b/5a, c=5c/5a, etc.						0.80489	0.19511			
7 Category 4	Account 2230 COE Circuit	ARMIS 43-04, Row 1400			2,243,037	940,088	-	505,849	-	797,102	-
8 Orig. Dist.	Line b= 7b/7a, c=7c/7a, etc.					0.419114	0	0.22552	0	0.355367	0
9 1996 Total Maintenance Expense		ARMIS 43-04, Row 5026			100,028	27,876	27,002	21,414	196	23,531	10
<b>Maintenance Expense 1998 Rules</b>											
					Distribution						
10	Account 6210 COE Switching	ARMIS 43-03, Col. I	219,967	0.635833	63,601						
11	Account 6220 Operator	ARMIS 43-03, Col. I	827	0.002391	239						
12	Account 6230 COE Circuit	ARMIS 43-03, Col. I	125,157	0.361777	36,188						
	Subtotal		345,951	1	100,028						
13	Account 6210 COE Switching	Col. c=L 6 x L10, Col. a			-	51,192	12,409	-	-	-	
14	Account 6220 Operator	Col. c=L 2 x L11, Col. a			-	12	1	215	-	11	
15	Account 6230 COE Circuit	Col. c=L 8 x L12, Col. a			15,167	-	8,161	-	12,860	-	
16	<b>Maint. Exp. Per Revised Part 69 Rules</b>	L 13 + L14 + L15			15,167	51,204	20,571	215	12,860	11	
17	Diff. Between Original and Revised Allocation	L 16 - L 9			(12,709)	24,202	(843)	19	(10,671)	1	
18	Reallocation of Switching Maintenance (.374486 of Switching Maintenance To Common Line)				9,063	(9,063)					
19	Total Exogenous	L 17 + L 18			(3,646)	15,139	(843)	19	(10,671)	1	
					Common Line	Traffic Sensitive	Trunking	Interexchange			
20 Exogenous At Basket Level Based on ARMIS for 1996					(3,646)	15,158	(11,514)	1			
21 Distribution to Elements					Revised	Original Filing	Exogenous Change				
Common Line					(3,646)	(3,527)	(119)				
Switching					15,139	14,879					
Information					19	-					
Total Traffic Sensitive					15,158	14,879	279				
Trunking					(11,514)	(11,684)					
6/30/97 Rate Factor											
Interconnection					\$506,396,252	0.530640	(6,110)	(11,684)	5,574		
Tandem Switched					\$52,208,238	0.054708	(630)		(630)		
Voice Grade					\$39,160,603	0.041035	(472)		(472)		
Audio/Video					\$2,422,612	0.002539	(29)		(29)		
High Cap & DDS					\$354,124,104	0.371078	(4,273)		(4,273)		
Wideband					\$0	0.000000	(0)		(0)		
Signalling Interconnection					\$0	0.000000					
Total Trunking					\$954,311,809	1.000000	(11,514)	(11,684)	170		
Interexchange						1	332	(331)			

**\*\* TANDEM TRANSMISSION RATES - MODIFIED METHOD \*\*****COMPARISON OF TANDEM TRANSMISSION RATES DEVELOPED UNDER ORIGINAL AND MODIFIED METHOD**

	<b>Current Revenue Per 7/3/97 Rates</b>	<b>Original Method</b>	<b>Modified Method</b>		
	Access Reform Tariff Filing, Workpaper Rate 7, Pg. 1, Col. (D)	Access Reform Tariff Filing, Workpaper Rate 7, Pg. 1, Col. (E)	Exhibit A, Page 2, Col. (D)	Effect of Re- initialization Based on <b>Original Method</b>	Effect of Re- initialization Based on <b>Modified Method</b>
	(A)	(B)	(C)	(D)=B-A	(E)=C-A
Tandem Transmission Rev. - Fixed & Mileage	\$32,141,881	\$14,274,293	\$25,759,715	(\$17,867,588)	(\$6,382,166)

	Access Reform Tariff Filing, Workpaper Rate 7, Pg. 1, Col. (A)	Access Reform Tariff Filing, Workpaper Rate 7, Pg. 1, Col. (B)	Exhibit A, Page 2, Col. (E)
<b>Tandem Transmission MOU Rates</b>			
<b>Excluding the Effect of Host &amp; Remote Cost Transfer</b>			
<b>Fixed</b>			
Miles Over 0-8	\$0.000431	\$0.000100	\$0.000345
Miles Over 8-25	\$0.000480	\$0.000112	\$0.000385
Miles Over 25-50	\$0.000490	\$0.000121	\$0.000393
Miles Over 50	\$0.000551	\$0.000132	\$0.000442
<b>Per Minute Per Mile</b>			
Miles Over 0-8	\$0.000020	\$0.000010	\$0.000016
Miles Over 8-25	\$0.000021	\$0.000010	\$0.000017
Miles Over 25-50	\$0.000021	\$0.000011	\$0.000017
Miles Over 50	\$0.000022	\$0.000012	\$0.000018

**\*\* TANDEM TRANSMISSION RATES - MODIFIED METHOD \*\*****REVISED TANDEM TRANSMISSION RATES EXCLUDING H&R COST TRANSFER FROM THE TIC**

	Tandem Transmission Rates Effective 7/3/97	1996 Base Year Tandem Transmission MOU (Including H&R MOU)	Tandem Transmission Rev @ Current Rates	Tandem Transmission Rev. Net of Over-allocation (Note 1) (D)=C*RAF	Revised Tandem Transmission Rates Excluding the Impact of H&R (E)=D/B	Over- allocation Inherent in Current Tandem Transmission (F)=D-C
	(A)	(B)	(C)=A*B	(D)=C*RAF	(E)=D/B	(F)=D-C
<b>Fixed</b>						
Miles Over 0-8	\$0.000431	3,747,994,740	\$1,615,386	\$1,294,631	\$0.000345	
Miles Over 8-25	\$0.000480	6,060,692,237	\$2,909,132	\$2,331,488	\$0.000385	
Miles Over 25-50	\$0.000490	3,457,165,472	\$1,694,011	\$1,357,644	\$0.000393	
Miles Over 50	\$0.000551	6,715,053,892	\$3,699,995	\$2,965,316	\$0.000442	
Total Fixed		19,980,906,341	\$9,918,524	\$7,949,079		
<b>Per Minute Per Mile</b>						
Miles Over 0-8	\$0.000020	19,050,524,158	\$381,010	\$305,356	\$0.000016	
Miles Over 8-25	\$0.000021	90,480,423,522	\$1,900,089	\$1,522,803	\$0.000017	
Miles Over 25-50	\$0.000021	125,208,508,235	\$2,629,379	\$2,107,283	\$0.000017	
Miles Over 50	\$0.000022	786,949,045,760	\$17,312,879	\$13,875,194	\$0.000018	
Total Per Mile		1,021,688,501,675	\$22,223,357	\$17,810,636		
Total Fixed & Mileage			\$32,141,881	\$25,759,715		(\$6,382,166)

**NOTE 1:**

1. % Over-allocation to Tandem Transmission
2. Revenue Adj. Factor (RAF)

**Source**

Exhibit A, Pg. 3, Column G  
1.0 - Line 1

-19.86%  
**80.14%**

**\*\*TANDEM TRANSMISSION RATES- MODIFIED METHOD \*\*****% OVER-ALLOCATION OF TIC TO 1993 INITIAL LTR TANDEM TRANSMISSION REVENUES  
BASED ON 9,000 MINUTES**

	1993 LTR Tandem Transmission MOU (LTR Filing Workpaper 8, Pg. 2)	Initial LTR Tandem Transmission Rates @9,000 MOU Per Trk. (Exhibit A, Pg. 6, Column (E))	Revised LTR Tandem Transmission Rates @ 11,353 MOU Per Trk. (Exhibit A, Pg. 5, Column (E))	Original LTR Tandem Transmission Rev.	Re-computed LTR Tandem Transmission Rev.	Over- allocation to Original Tandem Transmission Rev.	% Over- allocation
	(A)	(B)	(C)	(D)=A*B	(E)=A*C	(F)=E-D	(G)=F/D
<b><u>Per Facility</u></b>							
Over 0-8 Miles	2,202,834,856	\$0.000250	\$0.000198	\$550,709	\$436,161	(\$114,548)	
Over 8-25 Miles	2,375,661,168	\$0.000278	\$0.000220	\$660,434	\$522,645	(\$137,789)	
Over 25-50 Miles	1,755,391,536	\$0.000284	\$0.000225	\$498,531	\$394,963	(\$103,568)	
Over 50 Miles	4,359,907,070	\$0.000320	\$0.000254	\$1,395,170	\$1,107,416	(\$287,754)	
MOU Total				\$3,104,844	\$2,461,185	(\$643,659)	
<b><u>Per Mile Per Facility</u></b>							
Over 0-8 Miles	11,084,462,025	\$0.000027	\$0.000021	\$299,280	\$232,774	(\$66,506)	
Over 8-25 Miles	35,597,887,215	\$0.000028	\$0.000022	\$996,741	\$783,154	(\$213,587)	
Over 25-50 Miles	67,278,211,455	\$0.000028	\$0.000022	\$1,883,790	\$1,480,121	(\$403,669)	
Over 50 Miles	511,644,528,038	\$0.000031	\$0.000025	\$15,860,980	\$12,791,113	(\$3,069,867)	
Mileage Total				\$19,040,791	\$15,287,162	(\$3,753,629)	
Total Fixed and Mileage Rev.				\$22,145,635	\$17,748,347	(\$4,397,288)	-19.86%



**\*\* TANDEM TRANSMISSION RATES - MODIFIED METHOD \*\*****Revision to the LTR Initial Tandem Transmission Rates Based on Actual MOU of 11,353 Per Trunk**

	LTR Initial DS3 DTT Monthly Rates (A)	LTR Initial DS1 DTT Monthly Rates (B)	DS3 MOU Rate Weighted by Fiber % (C) Note (2)	DS1 MOU Rate Weighted by Copper % (D) Note (3)	Weighted DS3 & DS1 Rates Per Access MOU (E)=C+D
<b><u>Per Facility</u></b>					
Over 0-8 Miles	\$862.70	\$87.22	\$0.000120	\$0.000078	\$0.000198
Over 8-25 Miles	\$862.70	\$112.21	\$0.000120	\$0.000100	\$0.000220
Over 25-50 Miles	\$862.70	\$117.60	\$0.000120	\$0.000105	\$0.000225
Over 50 Miles	\$970.54	\$137.20	\$0.000131	\$0.000123	\$0.000254
<b><u>Per Mile Per Facility</u></b>					
Over 0-8 Miles	\$92.74	\$13.43	\$0.000009	\$0.000012	\$0.000021
Over 8-25 Miles	\$92.74	\$14.31	\$0.000009	\$0.000013	\$0.000022
Over 25-50 Miles	\$94.90	\$14.31	\$0.000009	\$0.000013	\$0.000022
Over 50 Miles	\$107.84	\$15.13	\$0.000011	\$0.000014	\$0.000025
<b>DS3/DS1 Multiplexer</b>	\$350.00				

	<b><u>MOU per DS3</u></b>	<b><u>MOU per DS1</u></b>
Actual MOU Per VG Trunk	11,353	11,353
Equivalent VG Trunks Per Facility	672	24
Total MOU Per Month Per Facility	7,629,216	272,472

	<b><u>DS3 &amp; DS1 Weighting % Based on Fiber &amp; Copper Links</u></b>	
	<b><u>Fiber</u></b>	<b><u>Copper</u></b>
ARMIS Report #4307	Line 0363	Line 0361
Digital Carrier Links	305,459	98,211
Proportion of Total	75.67%	24.33%

Note (1): Re-using the equation and input values (except for 9,000 minutes) of Workpaper 4, LTR D&J, 1993.

Note (2):  $[(\text{DS3 Wtgd. Monthly Rate} + \text{DS3/DS1 Mux Rate}) \times \text{Fiber \%}] / \text{MOU per DS3}$

Note (3):  $(\text{DS1 Monthly Rate} \times \text{Copper \%}) / \text{MOU per DS1}$